GWSS
Warehousing Application

Portable

The Generalized Warehouse Selecting Simulator (GWSS) evaluates alternate warehouse layouts, selection of equipment, and placement of material.

Key Words and Phrases: GASP (General Activity Simulation Program), time per trip, standard time, computer modelling.

GWSS allows the user to economically and quickly evaluate various warehouse systems and procedures, using computer modelling. A GASP discrete time simulator, GWSS enables the user to choose from parameters affecting layout, the selection of vehicles, selection probabilities, placement of materials, work volume (items and trips), and costs per item.

The simulator calculates vertical and horizontal distances, time per trip, vehicle utilization, aisle content and standard time. If required, cost per item selected is produced as well.

Hardware Requirements: Portable

Programming Language: FORTRAN

License Fee: $5,000 (1st CPU)
$2,500 (each additional CPU)

For more information, contact the Technology Licensing Manager, AT&T, P.O. Box, 25000, Greensboro, North Carolina 27420 or call (919) 697-6530

CRR Computer Management Aid IBM 360/370

CRR (Computer Restart and Recovery) software system is designed to augment the basic restart and recovery facilities distributed with the IBM Information Management System (IMS).

Key words and phrases: IBM Information Management System (IMS), Data Base Administration, Data Center Operations.

The CRR system provides procedures that enable the Data Base Operating Environment (DBOE) to be managed in such a way that insures a high degree of data integrity in a cost effective manner. CRR incorporates data processing methods in three general areas: (1) Data Administration, (2) Applications Development, and (3) Data Center Operations. Data integrity is maintained throughout the procedures.

Some of the advantages of a CRR supported DBOE are: (1) problem diagnosis and cause determination time is reduced, (2) less manual effort is required to manage the DBOE, due to automated record keeping and controls, (3) fewer data base recoveries are necessary, reducing data base and application "down time," (4) easily installed, and (5) data base recoveries can be performed more quickly with less risk and manual effort.

Hardware requirements:
   IBM 360/370 or AMDAHL 470/V61

Programming language:
   Assembler Language (BAL)

License fee:
   $15,000 (first central processing unit)
   5,000 (each additional CPU)

For more information, contact the Technology Licensing Manager, AT&T, P.O. Box, 25000, Greensboro, North Carolina 27420 or call (919) 697-6530

PAGES Computer Management Aid IBM 360/370

PAGES (Program Affinity Grouping and Evaluation System) is an automated system which reduces IBM operating system overhead by defining the optimum placement of modules within the Link Pack Area, thus minimizing page fault occurrences.

Key words and phrases: IBM operating system overhead reduction, pageable Link Pack Area (LPA), module placement, packing lists.

PAGES is an automated system which reduces IBM operating system overhead in several specific areas: supervisor execution time; head movement and device-busy on the pageable Link Pack Area (LPA) page-data-set device; head movement and device-busy on the load library devices; channel-busy time; and total elapsed run time.

PAGES reduces overhead by defining to the operating system the optimum placement of modules within the LPA—thus minimizing the page fault occurrences caused by interprogram transfers of control

between modules. PAGES constructs this optimum placement —or "packing list"—by using a combination of module-affinity and module-activity analysis, with consideration given to operating system link pack loading constraints.

PAGES can also reduce wait-state time for load-library retrieval by applying module-activity analysis to determine optimal module placement in load libraries. In fact, PAGES generates reports which can be used to eliminate certain wait-state conditions.

Finally, PAGES includes simulator programs for use in comparing packing lists and their expected results for different page dataset sizes, jobs, and program mixes.